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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/622,082	07/17/2003	Karen L. Boso	11492/288	1846
757	7590	07/18/2005	EXAMINER	
BRINKS HOFER GILSON & LIONE P.O. BOX 10395 CHICAGO, IL 60610			SAFAVI, MICHAEL	
			ART UNIT	PAPER NUMBER
			3673	

DATE MAILED: 07/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/622,082	<b>Applicant(s)</b> KAREN L. BOSO	
	<b>Examiner</b> M. Safavi	<b>Aft Unit</b> 3673	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 February 2005.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-43 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>2/22/05; 6/13/05</u> . | 6) <input type="checkbox"/> Other: _____  |

### ***Drawings***

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: reference numerals 45 and 56. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The drawings are objected to under 37 CFR § 1.81(a) and 37 CFR § 1.83(a). Figure 12 appears to improperly show "bottom layer" 20 as above "top layer" 36 while "coils" 32 appear as placed between the top and bottom layers 36, 38 of the top portion 14. For that matter, "top layer" 16 appears to be above both the "top layer" and the "bottom layer" of the "top portion" 14. Correction is required.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is

being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 32 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is not clear as to how the top layer of the lower chamber "is welded to produce a textured appearance". The specification does not appear clear and complete as to such welding.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

**Claims 1, 3, 17-21, 33 and 40-43 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,423,094 to Arsenault et al.**

With respect to claims 1, 17, 33 and 40, Arsenault et al. discloses, Fig. 3, an inflatable support system having at least two sections 6, 12, said system comprising a lower chamber 12 comprised of a top and bottom layer, and an upper portion 6 comprising a top and bottom layer in fluid communication with said lower chamber as by 18, for example. Upper portion 6 and lower chamber 12 are formed of rubber like material. The upper portion 6 and lower chamber 12 are made of a material having different elasticity to allow the upper portion to compress sufficiently for comfort when a load is applied while the lower chamber compresses less so to maintain stability, col. 3, lines 3-9 and 52-56. A side gusset, (e.g., side panel), is formed along the lower chamber.

As concerns **claims 3 and 41**, a pump is removably connected to the inflatable support system via 34.

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As concerns **claim 18**, the first layer of the upper portion 6 is a top layer of the upper portion 6.

As concerns **claim 19**, the upper portion 6 further comprises a bottom layer of material, (bottom layer of 6), wherein the second layer of material is the bottom layer of the upper portion and the top layer of the lower chamber.

As concerns **claim 20**, a second layer of material is the top layer of the lower chamber 12.

As concerns **claims 21 and 42**, the lower chamber has a bottom layer as well as side gusset 16.

As concerns **claim 43**, valve capable of deflating is at 34.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1-10 and 17-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,598,593 to Wolfe in view of U.S. Patent No. 6,618,884 to Wu.**

As concerns claims **1, 2, 17-22, 33, and 40** Wolfe discloses, Figs. 2, 4, 6, 8, and 9, an inflatable support system comprising a lower chamber 12 comprised of a top and bottom layer 18' and 14, and an upper portion 20 comprising a top

and bottom layer 21 and 18', col. 4, lines 4-10. Upper portion 6 and lower chamber 12 are formed of 16-gauge polyvinylchloride material, col. 4, lines 45-55, (claim 2). A side gusset of the lower chamber is at 12, (claim 6).

As concerns **claims 3 and 41**, a pump is removably connected to the inflatable support system, col. 5, lines 24-30.

As concerns **claims 4 and 43**, the inflatable support system includes a first valve 16, 24 and a second valve 17, 25 for inflating and deflating the inflatable support.

As concerns **claim 5**, a user can adjust pressure within the inflatable support via any of the first and second valves.

As concerns **claims 7 and 24**, the top and bottom layers 21, 18' of both upper portion are welded together as by 23 with the upper portion 20 being welded to the top layer 18' of the lower chamber, col. 4, lines 4-10.

As concerns **claims 10, 38, and 42**, the bottom chamber 12 has a plurality of structural elements 30 defined therein.

As concerns **claim 23**, the bottom edge 12' of the lower chamber extends beyond "at least a portion of an outer edge of...[the] top layer".

As concerns **claims 28-31**, upper portion 20 can be seen as comprised of a plurality of chambers, (including a first type and a second type), formed by 38, 34, for example. A first type of chamber is formed along the outer edges of the two opposing sides of the upper chamber as formed by 38 with all other chambers comprising the "second type of chambers".

As concerns **claim 32**, top layer 18' of the lower chamber "is welded to produce a textured appearance".

As concerns **claims 22, 34, 35 and 37**, upper portion 6 and lower chamber 12 are formed of 16-gauge polyvinylchloride material or any gauge between 12 and 28, col. 5, lines 12-23.

Wolfe does not specifically address the elasticity of either the upper portion or the lower chamber, (**claims 1, 8, 17, 33, 36, 39, and 40**), and does not specifically provide for fluid communication between the upper portion and the lower chamber, (**claims 9 and 25-27**).

However, Wu discloses an inflatable structure having an upper portion 2 in communication with a lower chamber 1 via a plurality of circular openings 111/222 with a hole 222 defined in the bottom layer of the upper portion in substantial alignment with at least one opening 111 defined in the upper layer of the bottom chamber. A plurality of chambers can be seen in both the upper and lower portions with structural elements 15 defined within the lower chamber 1. Wu desires a greater elasticity along the upper portion 2 so as to provide a supple upper layer 2 for user comfort. Wu's disclosure suggests as at col. 3, lines 12-18, forming the upper portion material of a greater elasticity than the lower chamber material.

To have provided the Wolfe mattress with openings allowing air communication between the upper portion 20 and the lower chamber 12 as well as form the material of the upper chamber with a higher elasticity than the material of the lower chamber, (including structural elements 30), thus allowing



for greater flexibility of the upper portion so as to provide greater comfort to a user, would have been obvious to one having ordinary skill in the art at the time the invention was made as taught by Wu.

**Claims 11-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wolfe in view of Wu as applied to claims 1-10 and 17-43 above, and further in view of Jordan.**

Jordan teaches application of elongated oval structural members 12 within a lower chamber of an inflatable mattress so as to provide support therein. To have provided the modified Wolfe mattress with elongated oval structural members in place of or along with members 30 within the lower chamber 12 so as to provide sufficient support therein would have been obvious to one having ordinary skill in the art at the time the invention was made as taught by Jordan.

**Claims 2, 22, and 34-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,423,094 to Arsenault et al. in view of any of U.S. Patent No. 4,241,465 to Yarimie et al., U.S. Patent No. 4,860,395 to Smith, or U.S. Patent Publication No. 2002/0108179 to Kiser.**

Each of Yarimie et al., Smith, and Kiser teach inflatable cushions formed of polyvinylchloride material of around 20-27 gauge, col. 1, lines 55-56 and col. 2, lines 31-33 of Yarimie et al., col. 2, lines 31-32 of Smith and line 16 of paragraph 34 of Kiser. Therefore, to have formed the layers of the Arsenault et al. cushion of a PVC material of 16-28 gauge with the material of the upper chamber being

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of a lesser gauge than those of the lower chamber, thus allowing for an appropriate degree of elasticity within one chamber and another, would have been obvious to one having ordinary skill in the art at the time the invention was made as taught by any of Yarimie et al., Smith, and Kiser.

As for **claims 38 and 39**, the walls of the bladders 10 would constitute the "plurality of upstanding generally vertical structural elements defined within said lower chamber and forming interstitial spaces therein."

**Claims 3 and 41-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,423,094 to Arsenault et al. in view of U.S. Patent No. 5,367,726 to Chaffee.**

Chaffee '726 discloses as old and well known the utilization of a pump to inflate a cushion. To have provided a pump with the Arsenault et al. cushion, thus allowing for easy and rapid inflation of the cushion, would have been obvious to one having ordinary skill in the art at the time the invention was made as taught by Chaffee.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. Safavi whose telephone number is (571) 272-7046. The examiner can normally be reached on Mon.-Thur., 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Shackelford can be reached on (571) 272-7049.

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The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**MICHAEL SAFAVI  
PRIMARY EXAMINER  
ART UNIT 354**

M. Safavi  
June 30, 2005